Amendments to the Specification

Please amend the specification of International Publication Number WO 2005/016783 as follows:

On page 22, please replace paragraph 3 that starts with the words "The two shells 17" and ends with the words "(not shown)." with the following amended paragraph:

The two shells 17 are connected to one another in a foldable manner at two adjoining edges. The two other edges can have corresponding locking ~~means~~ structures (not shown).

On page 24, please replace paragraph 5 that starts with the words "FIG. 11 shows a" and ends on page 25 with the words "partition wall 16." with the following amended paragraph:

FIG. 11 shows a cartridge 11 similar to that shown in FIG. 10. Each piston 19, 20 has a piercing tip or piercing edge 29 in the area of the cartridge wall. The sealing foil 28 and the pistons 19, 20 are configured in such a way that each piston 19, 20, when advanced into the allocated component chamber 13, 14, pierces the sealing foil 28 only in the area of the cartridge wall. When advanced farther (right picture), the pistons 19, 20 ~~apply~~ push the sealing foil 28 ~~to~~ toward the partition wall 16.

On page 25, please replace paragraph 2 that starts with the words "FIG. 12 shows a" and ends with the words "chambers 13, 14." with the following amended paragraph:

FIG. 12 shows a cartridge 11 and pistons 19, 20 similar to those shown in FIG. 10. Each component ~~chambers~~ chamber 13, 14 is closed off at its front end by a sealing foil 30 that breaks (right picture) when the pistons 19, 20 are advanced into the component chambers 13, 14.

On page 25, please replace paragraph 4 that starts with the words "The container used is" and ends on page 26 with the words "larger batch numbers." with the following amended paragraph:

The container used is preferably a cylindrical cartridge 11 (FIG. 14) with two or more channels or chambers 13, 14 which are arranged on the longitudinal axis of the cylinder and receive the pastes. Optionally, it is possible to use an individual cartridge for each paste component. This provides advantages in manufacturing pastes with several colour shades: one component contains the different shades, while the other always has the same composition and can be produced in larger ~~batch numbers~~ batches.

On page 28, please replace paragraph 2 that starts with the words "After the filling procedure" and ends with the words "(depending on the filled paste)." with the following amended paragraph:

After the filling procedure, the filling nipples 38 are closed off (FIG. 22), e.g. by squeezing with heated or unheated tools. The squeezing can be done using tools with two, three or more jaws. This ensures that the filling procedure is carried out free from air bubbles. Instead of squeezing, it is also possible to seal the filling nipples 38 by ~~means of~~ a (e.g. heated) wire loop, so that, instead of a wide seal seam, a substantially round pressing is obtained. Alternatively, the filling nipples 38 can be closed by twisting them. The nipples 38 are preferably heated for this purpose. Sealing would also be possible if the inner surface of the nipple 38 is contaminated with paste (depending on the filled paste).

On page 29, please replace paragraph 1 that starts with the words "Another option is for" and ends with the words "adhesive sealing foil 30." with the following amended paragraph:

Another option is for the cartridge 11, unsealed at the front, to be filled from the front end. In this case, openings are not necessary in the closures 37. After the cartridge 11 has been filled, it is closed by ~~means of~~ a thermally applied, e.g. heat sealed, sealing foil 30 or by ~~means of~~ an adhesive sealing foil 30.

On page 30, please replace paragraph 1 that starts with the words "FIG 27 shows a" and ends with the words "openings in the pistons." with the following amended paragraph:

FIG. 27 shows a cartridge 11 having the chambers 13, 14 sealed at one end (by foil 30) and filled to a defined level and then closed with pistons 19, 20. This permits an air-free filling of the cartridge 11. The pistons in this case are designed to be air-permeable, so that the air can escape, while the pistons are pushed into the chambers and therefore no air is trapped in the chambers. The pistons are on the other hand configured in such a way that they are impervious to the paste located in the chambers. Possible solutions in this respect are pistons made of sintered materials, open-pore foams, or small openings in the pistons.

On page 30, please replace paragraph 2 that starts with the words "After fitting the" and ends with the words "necessary storage stability." with the following amended paragraph:

After fitting the pistons, the cartridge is sealed (by foil 28) in order to ensure the necessary storage stability.

On page 30, please replace paragraph 4 that starts with the words "Optionally, the sintered" and ends with the words "the channels 49." with the following amended paragraph:

Optionally, ~~the~~ sintered pistons 19, 20 can be combined with the hotmelt sealing principle. In a preferred embodiment shown in FIG. 28, the pistons 19, 20 are only partially porous, as shown at the porous sinter part 49, and have channels 49 for injection of a sealing material (hotmelt 64). Such pistons can be produced for example by compaction of the sintered material 48 (optionally under the action of heat), by two-component injection-molding, or by foils sealed on at the ends. After the pistons have been fitted into the chambers 13, 14 filled with dental substance, these are sealed off by injection of the sealing material. During fitting of the pistons, the channels 49 are still open, so that when the pistons are moved into the chambers, the displaced air can escape through the porous sinter layer 48 and the channels 49.

On page 31, please replace paragraph 4 that starts with the words "To fill the cartridge" and ends on page 32 with the words "and the pistons." with the following amended paragraph:

To fill the cartridge 11, the pistons 19, 20 can first be pushed into the chambers until they reach their front end position. The filling needles 40 are then guided through the pistons 19, 20 (FIG. 31). During filling, the pistons are pushed back by the paste pressure and the filling needles are guided back mechanically (principle: immersion filling) (FIG. 32). In this way, inclusion of air in the chambers is avoided. The pistons are preferably made of an elastic material (e.g. rubber), the filling needles piercing through the pistons. After the filling procedure, the filling needles are pulled out, by which means the paste, because of the elastic properties of the piston material, is stripped off from the filling needles. The openings also close automatically because of the elastic properties of the piston material. Nevertheless, the cartridge can be sealed if required, the pistons then also being sealed in. It is in turn possible to provide an air volume between sealing foil and the pistons.

On page 32, please replace paragraph 4 that starts with the words "A further possibility" and ends on page 33 with the words "volume for this." with the following amended paragraph:

A further possibility for air-free filling is provided by pistons 19, 20 with inclined air vent channels 66 (FIG. 33). The channels 66 extend from the front end of the piston 19, 20 to the outer wall or shell of the piston. When the pistons are pressed into the ~~chambers~~ chambers 13, 14, the filled substance can escape outwards through the channels. The piston is sealed off only when it has been pressed in so far that the opening on the shell is located in the chamber. Excess substance can then either be suctioned off or stripped off from the opening. The piston can optionally be pressed still farther into the chamber if the sealing foil is slightly elastic or thermoformed to provide the necessary volume for this.

On page 35, please replace paragraph 2 that starts with the words "In order to ensure" and ends with the words "(e.g. through temperature fluctuations)." with the following amended paragraph:

In order to ensure optimal stability of the hotmelt closure, the filling bores in the mouth or inner cone area to the cartridge are equipped with a double cone shape. This ensures that the "hotmelt

stopper" 64 (FIG. 41) seals by shrinking and that, in the event of excess pressure or low pressure, cannot come loose in the cartridge (e.g. through temperature fluctuations).

On page 35, please replace paragraph 4 that starts with the words "With the solution" and ends on page 36 with the words "air-free sealing (FIG. 46)." with the following amended paragraph:

With the solution shown in FIG. 43 to FIG. 47, a cartridge 11 can be filled free from air and can be sealed without appreciable air inclusions. In this case, the component chambers 13, 14 have, at least at one end, a narrowing cross section (FIG. 43 and FIG. 47) which creates an enlarged sealing surface on the end face of the cartridge 11 (the narrowing cross section will be arranged to the front end side of the housing 31 as the pistons can only penetrate the cartridge from the open side – as an option the cartridge 11 may be arranged in the opposite orientation if it is used together with the embodiment shown in FIG. 71 and 72). In the filling procedure by ~~means of~~ immersion filling (FIG. 44 and FIG. 45), the minimum filling level is flush with the end face of the cartridge (right picture of FIG. 45), with filling tolerances giving a slight excess. The enlarged sealing surface has the effect that the possible excess, upon application of the sealing foil 30, wets only a very small part of the sealing surface and, together with the rest of the sealing surface, leads to a safe and air-free sealing (FIG. 46).

On page 38, please replace paragraph 2 that starts with the words "In a fourth variant" and ends with the words "the abovementioned methods." with the following amended paragraph:

In a fourth variant (FIG. 57~~and~~ and FIG. 58), the piston itself has sealing ~~means~~ features (e.g. sealing beads or bulges). In this variant, the chamber is preferably filled from the front end of the capsule (FIG. 57), the piston being pushed or drawn back with the paste filling level. In the end position of the piston (FIG. 58), the latter is then fixed and sealed off by ~~means of~~ a sealing material according to one of the abovementioned methods.

On page 38, please replace paragraph 4 that starts with the words "FIG. 59 to FIG. 61" and ends with the words "(FIG. 69, FIG. 70)." with the following amended paragraph:

FIG. 59 to FIG. 61 show the capsule 10 comprising the cartridge 11, the pistons 19, 20, the pivoting cannula 21, and a cap 53 for ~~fixing~~ affixing the cannula 21. FIG. 59 shows the capsule 10 before fitting the cap 53, and FIG. 60 shows the capsule 10 after fitting the cap 53. FIG. 61 shows a longitudinal section through the first component chamber 13 and first piston 19. Here, the component chambers 13, 14 and the pistons 19, 20 each have circular cross sections. The pistons 13, 14 are connected at their back ends to a connecting piston having a circular cross section of larger diameter fitting to the diameter of the plunger 63 of an applicator 62 (FIG. 69, FIG. 70).

On page 39, please replace paragraph 1 that starts with the words "A preferred solution" and ends with the words "as shown in Fig. 63." with the following amended paragraph:

A preferred solution for encapsulating the materials in the cartridge 11 and to keep them apart from one another is to close the rear end of the component chambers 13, 14 by plugging with the pistons 19, 20 whereas o-rings mounted on the pistons 19, 20 are used as ~~seal~~ seals. The front ends of the chambers are closed by the rotatable nozzle or cannula 21 which acts as a valve. As a seal, o-rings are used or a customized rubber seal 60 as shown in Fig. 63.

On page 39, please replace paragraph 2 that starts with the words "In an optional" and ends with the words "layer (FIG. 56)." with the following amended paragraph:

In an optional preferred solution, hotmelt sealing is used, e.g. as described with respect to FIG. 48 to FIG. 58. In ~~this~~ these eight ~~embodiment~~ embodiments, it is preferred that in a first step the component chambers 13, 14 are filled with the respective components (FIG. 54). In a second step the component chambers 13, 14 are closed off with hotmelt 64 (FIG. 55). In a third step the piston 19, 20 is fitted into the still soft sealing material in a way that ~~is~~ it does not pass the sealing material layer (FIG. 56).

On page 41, please replace paragraph 1 that starts with the words "The capsules 10" and ends with the words "outer pistons 57." with the following amended paragraph:

The capsules 10 in the embodiments shown in FIG. 71 to FIG. 74 provide a ~~means~~ way to store, static mix and directly deliver the mixed material. The piston assembly 54 is one piece with breakable seals 55 between the inner pistons 56 and the outer pistons 57.

On page 42, please replace paragraph 5 that starts with the words "It may be provided" and ends on page 43 with the words "in the housing 31." with the following amended paragraph:

It may be provided that the cartridge 11 is fixed by fixing elements ~~or fixing means~~, preferably by a "snap lock" 65 in the front-end position of the cartridge 11 (FIG. 76). The cartridge 11 is locked as soon it reaches the front-end position in the housing 31.